

# Release Notes – Hotfix for Dell Wyse Device Manager (WDM) Version 4.9.1

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## Introduction

This maintenance update (also known as a hotfix - HF04091025213) provides several improvements for Dell Wyse Device Manager (WDM) 4.9.1 including:

- New/updated platforms:
  - Windows Embedded 8 Standard (WE8S) 64 bit with Secure Boot (with UEFI 2.3.1 compliant BIOS) for Z90D8, D90D8 thin clients
  - D10DP – WTOS PCoIP devices
  - Support for quad-core thin clients of D and Z class: D90Q7, Z90Q7, D90Q8, and Z90Q8
- Remote session information for accounting/chargeback of Wyse ThinOS devices
- Support for installing this hotfix (HF04091025213) over previous hotfix (HF2: HF04091013713) when WDM Database (for WDM Enterprise customers) is configured using Windows Authentication. Refer to release notes for HF2 for more details on setting up Windows Authentication for WDM Database connections.
- Updated WDM components for thin clients:
  - WDM agents, also known as hagents, for various thin client platforms.
  - Imaging boot agent (also called Merlin) for all thin client platforms, including WE8S 32 bit and 64 bit.
- Bug fixes
  - CIR 70937: WDM cannot save Xenith 2 firmware in DDC (for WDM Enterprise)
  - CIR 74114: Unable to connect to WDM database if SQL server is using a custom port

For additional details on changes in this hotfix see section Changes in this Version.

- Hotfixes cannot be uninstalled after installation. It is recommended to snapshot the WDM virtual machines (VM's), if you are using virtual infrastructure, prior to installing this hotfix.
- Previously released two WDM 4.9.1 hotfixes are a prerequisite for installing this hotfix:
  - HF1: HF04091034412 (released in Dec 2012)
  - HF2: HF04091013713 (released in May 2013)

## Notes on WDM 4.9.1

Refer to release notes for WDM 4.9.1 for more details on features and changes in WDM 4.9.1.

- Use of WDM 4.9.1 requires that WDM agents running on your Dell Wyse devices (including WTOS firmware version 8.0\_122 or higher) to be upgraded. If WDM agents

(and WTOS firmware) are not upgraded then you will be able to perform a subset of all the supported management functions. See the Upgrading Details for HAgents section for more details on the procedure for upgrading details for WDM agents.

- To securely manage your Dell Wyse devices it is recommended to follow the guidelines provided by the Wyse knowledge base article (KB 22428). This KB is available at [www.wyse.com/manuals](http://www.wyse.com/manuals) for download.
- This document uses the term device to generally refer to WDM Agents (also known as HAgents) running on Wyse devices. WTOS firmware includes an integrated HAgent.

Contents

Introduction..... 1

Notes on WDM 4.9.1..... 1

Changes in this Version..... 4

Issues Fixed in this Release ..... 5

Known Issues and Limitations..... 5

    Pre-install Checklist (Prerequisites)..... 8

    Install Steps..... 8

    Upgrade Details for WDM Agents..... 9

Supported Platforms for Installing the Hotfix..... 10

Software Information..... 10

Troubleshooting ..... 12

    Installation Issues:..... 12

## Changes in this Version

- **WE8S 64 bit with Secure Boot**
  - Support for Dell Wyse thin clients running WE8S 64bit, including secure boot.
  - Activation is not required after imaging with WDM if WE8S 64 bit devices shipped from factory were pre-activated.
  - All normal management features are supported, including push and pull of images.
  - Imaging (push) of WE8S will go through a number of steps to push multiple OS/device partitions.
  - WDM provides progress updates of imaging in Update Manager.
  - Secure boot (enabled by default) is supported with UEFI 2.3.1 BIOS.
  - PXE imaging is not supported when secure boot is enabled. Non-PXE (also called as PXEless or Merlin) is supported with secure boot.
  - Autogenic imaging is currently not supported for WE8S 64 bit devices.
- **D10DP – Wyse ThinOS PCoIP devices**
  - Management of D10DP requires a separate WDM license. Both Enterprise and Workgroup customers can request it from Dell Wyse customer support.
- **Remote session information for accounting/chargeback of Wyse ThinOS devices**
  - Remote session usage information can be used to bill end-user's department based on usage data.
    - For example, at the end of every month IT administrator can collect usage data and bill based on number of days or hours devices were used.
  - Note:
    - This feature requires Wyse ThinOS firmware version 8.0\_037 or higher on supported platforms: C10LE, R10, T10, D10D.
    - Collected information may contain incomplete information if session is manually created (instead of INI file) on the device.
    - Enabling this feature requires installation of database scripts for cleanup of remote session information from the database. See Appendix A – Cleanup of Remote Session Information from WDM Database for steps on configuring the cleanup scripts.
  - At every partial checkin (default 1 hour, configurable in WDM → Configuration Manager) device will provide information on its currently running remote sessions (ICA, RDP).
    - Information collected: Connection Type (RDP, ICA), Connection Name (from INI file or in device GUI), Server Name or Broker name, Domain of user, Username, First checkin time, Last checkin time, Connection Status (if the next checkin does not include a previously reported checkin then its assumed to be closed, or at midnight each day).
  - Remote session information can be seen in the device's detailed asset information (select a device in GUI → press "+" on right-bottom → Remote sessions tab).
  - The feature can be enabled (disabled by default) and set from:
    - Configuration Manager → Preferences → Device Manager → Collect Data for Remote Sessions.
    - Admins can set "Delete Data Older than (days)". Default is 45 days.

- It is recommended to not set this value to more than 90 days as the amount of data stored in the database can increase dramatically. If data for a larger period is required, it is recommended to increase the partial checkin time of devices from 1 hour (default) to 4 hours or larger.
- Reports:
  - Remote Sessions History Report: detailed log of all collected information; offers filtering by all the data collection fields and duration.
  - Remote Sessions Summary Report: provides a high-level summary of each users' total hours and days (hours divided by 24) over a specified duration.
- **Bug fixes**
  - CIR 70937: WDM cannot save Xenith 2 firmware in DDC (for WDM Enterprise)
  - CIR 74114: Unable to connect to WDM database if SQL server is using a custom port

**Note:** Each of these platforms will be displayed in WDM GUI with a suffix of 'x' to identify them as 32bit, i.e. Z90D8x, Z90D8Ex, D90D8x; check the OS . 64 bit platforms will not have a special designation in WDM GUI.

### Issues Fixed in this Release

Issue or CIR/TIR#	Brief Description of Issue	Platform or OS Affected	Additional Description
CIR 70937: WDM cannot save Xenith 2 firmware in DDC (WDM Enterprise only)	When trying to save a Xenith2 firmware for a DDC with ImageSize=0 one can choose the correct file in DDC, but on closing and reopening DDC, the correct firmware file will no longer be selected.	Xenith	
CIR 74114: Unable to connect to WDM database if SQL server is using a custom port	When installing a hotfix (reported for HF2) on WDM 4.9.1 if a static custom SQL port was setup in the SQL Server, then the Hotfix fails to install.		Workaround: Customers installing HF2 must configure the SQL port to the default port of 1433 and then install HF2.  This workaround is not required in HF3.

### Known Issues and Limitations

Following are the known issues and limitations in this hotfix.

TIR/CIR Number	Description (Steps to reproduce issue)	Platform or OS Affected	Work around/Comment
TIR73260: D90Q7 platform device is not discovered in WDM 4.9.1 HF3 after upgrading WDM from HF2 with Z90Q7 and Z90D8 (64 bit) devices are discovered in HF2.	If you have already discovered Z90Q7 and Z90D8 in HF2 then D90Q7 devices are not discovered in HF3, This occurs since Platform ID for both the platforms is same.	D90Q7, Z90Q7 and Z90D8	If any Z and D Class quad-core devices discovered in WDM 4.9.1 HF2, then delete the devices from WDM Database and rediscover the devices after installing HF3.
TIR73403: Image is getting pulled by WDM when a scheduled package is in Now state.	After executing sysprep command on D90D8/D90Q7 device pull the device image; when the device shuts down and if the device is then started up in non-PXE mode, then the image is being pulled even though the scheduled package is in Now state.	D90D8, D90Q7	NA
TIR72353: Updated hostname is not getting reflected in WDM GUI after changing the hostname from DELL FX170 device with WES7 OS.	After changing the host name in FX170 device having WES7 OS the device is not checking in to WDM with the changed host name.	FX170 running WES7	NA

TIR/CIR Number	Description (Steps to reproduce issue)	Platform or OS Affected	Work around/Comment
TIR73501: Imaging goes in a loop for X50C devices.	When deploying an OS update (Merlin format) to X50C device, the imaging process causes the device to update and reboot repeatedly.	X50C	NA
TIR73763: Scheduled OS image push should not trigger for more than the maximum simultaneous allowed devices (5 devices at a time as per default server settings)	By default a WDM package can be scheduled to only 5 devices simultaneously (5 is maximum for WDM Workgroup; WDM Enterprise allows larger numbers), But when pushing the image package to more than 5 (or default number of) devices then the remaining devices get the scheduled update and reboot the OS, but they do not receive the OS image.	All platforms	NA
TIR74094: Editing a View's name when logged in as a user to WDM, it creates a new View instead of editing the existing View.	Editing a View's name when logged in as a user to WDM, it creates a new View instead of editing the existing View.	NA	NA
Error when registering an OS package into WDM Package Manager	If the OS package's WDM RSP script's XML tags are not appropriate then a Merlin format OS image package cannot be registered in WDM GUI unless it is corrected.		The RSP script of WDM OS package may be missing the correct information at the beginning of the XML section. Update the RSP file before registering it in WDM as follows "<imageType><sourceMethod>

TIR/CIR Number	Description (Steps to reproduce issue)	Platform or OS Affected	Work around/Comment
			<pre>&lt;merlinImage&gt;&lt;versionNumber&gt;2.7.3&lt;/versionNumber&gt;&lt;/merlinImage&gt;&lt;/sourceMethod&gt;&lt;/imageType&gt;" or remove the "&lt;?xml version="1.0" encoding="UTF-8"?&gt;"</pre>

### Pre-install Checklist (Prerequisites)

Hotfixes cannot be uninstalled after installation. It is recommended to snapshot the WDM virtual machines (VM's), if you are using a virtual infrastructure, prior to installing this hotfix.

- Prior to starting the hotfix installation, ensure that all scheduled packages have completed and the DDC (Default Device Configuration, for WDM Enterprise customers) feature is disabled. This is required to ensure that no device-specific updates are pending while a WDM upgrade is in progress. Also, ensure that all the WDM GUI instances (local or remotely connected) are closed prior to starting the upgrade.
- Prior to installing the hotfix ensure that all local and remote connections to the WDM server have closed all WDM GUI sessions, i.e. the WDM GUI should not be open while the hotfix installation is in progress.
- Software repository should be configured as HTTP and FTP, or only FTP; same changes should be done in the WDM GUI under Preferences -> Services -> Repository Preferences. You can restore the repository settings after installing the hotfix.
- Previously released two WDM 4.9.1 hotfixes are a prerequisite for installing this hotfix:
  - HF1: HF04091034412 (released in Dec 2012)
  - HF2: HF04091013713 (released in May 2013)

**Note:** It is recommended that after upgrading the WDM server and its components, upgrade the WDM agents and boot agents (also known as Merlin or non-PXE partition) on all the applicable devices before any other management operations.

### Install Steps

The hotfix needs to be applied to the following WDM components (if they are installed on separate machines – applicable to WDM Enterprise Edition only). In WDM Workgroup Edition all components are installed on the same server.



WDM Enterprise Component	Hotfix Must be Installed (Yes/No)
WDM Server	Yes
One/more WDM GUI Console	Yes
WDM Database	Yes
Master Software Repository	Yes
One/more Remote Software Repository	Yes (If the remote repository is installed through the installer HF needs to be installed)

1. Unzip the file.
2. Run Setup.exe with Administrator privileges: right-click on the exe and select 'Run as Administrator'.
3. After installation completes, to confirm the HF installation click on the Console Root → 'Wyse Device Manager' on the left-side panel of the GUI, and right-click on 'About Wyse Device Manager'.

### Upgrade Details for WDM Agents

New WDM agents (also known as HAgents) for the following platforms are included with the hotfix. Use of WDM 4.9.1 requires that WDM agents running on your Wyse devices (including WTOS firmware) must be upgraded to the latest version.

OS / Platform	WDM Agent Version Included
Windows Embedded Standard 7E	6.1.0.39
Windows Embedded Standard 7P	6.1.0.39
Windows Embedded Standard 2009	5.2.0.32
Windows XP Embedded	5.2.0.32
Wyse enhanced SUSE Linux (SLETC 11 SP1)	5.0.140-00.01
Wyse enhanced Ubuntu Linux (T50)	5.0.39
Wyse enhanced SUSE Linux (SP2 Hagent)	5.0.150-00.00
CE.Net (CE 5) Hagent	4.8.16.0
Non-PXE (PXEless or Merlin) imaging boot agent for Wyse-enhanced SUSE Linux	2.8.0-00.00
Non-PXE (PXEless or Merlin) imaging boot agent for 32 bit Windows Embedded platforms	2.8.0

Non-PXE (PXEless or Merlin) imaging boot agent for WE8S 64bit OS	2.0.1
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**Additional Notes:**

- The latest (WDM 4.9.1 compliant) agent for CE.6 is available on wyse.com → Support → Downloads; there are no changes to it.
- The non-PXE (Merlin) imaging agent/partition uses the following search order for finding the WDM server:
  - Registry entry (saved by the WDM agent)
  - DNS SRV record
  - DNS Hostname (A record)
  - DHCP Option tags/ DHCP Proxy Server

**Supported Platforms for Installing the Hotfix**

This hotfix can be installed on any OS platform supported for WDM 4.9.1. The hotfix has been tested on the following OS (for WDM server) and database (for SQL Server) environments:

- Windows 2008 R2 Enterprise 64bit
- Windows 2008 Standard SP1 32bit
- Windows 2008 SP2 64bit
- Windows 7 Enterprise 32 bit
- Windows 7 Enterprise 64 bit
- Windows 2003 R2 SP2
- SQL Server 2005 and 2008 Enterprise (32 bit)
- SQL Express 2008 (32 bit)

**Software Information**

Title	Hotfix (HF3) for Dell Wyse Device Manager 4.9.1 to support WE8S 64bit OS and D10DP. Requires HF1 and HF2 as prerequisites.
Product	Dell Wyse Device Manager (WDM)
Version	HF04091025213
Filename	WDM_4.9.1_ HF04091025213.zip
MD5 Checksum	BA1BD15E0A1322E146CF5F19F06D0D70
File Size	88.5 MB (92,882,936 bytes)
Part Number	153127-35
Part Description	PGM CDE,WDM.V4.9.1 HF04091025213
Date	17-Sep-2013

To calculate MD5 checksum you can use eXpress Checksum Calculator, available at <http://www.iris.net>, or other utilities.

## Troubleshooting

### Installation Issues:

**Issue:** During installation the following message may appear”

“Could not copy the file: (<HF unzip folder>\SetupFiles\System32\RptSrvComm.dll) to (C:\Windows\SysWOW64\RptSrvComm.dll) Error#: -2147418113”

**Cause:** Installer was not run with Administrator privileges or installer could not shutdown WDM services to copy the new files.

**Solution:** Ensure that you are running the installer (setup.exe) with Administrator privileges (right-click and select ‘Run as Administrator’). An alternative is to shut down all the WDM services (World Wide Web Publishing Service, WDM TFTP, WDM DHCP Proxy, ThreadX Manager), rename the existing RptSrvComm.dll file and then copy the new file from the installer’s folder.

## Appendix A – Cleanup of Remote Session Information from WDM Database

This section provides information on installing SQL Server scripts to cleanup older remote session information from the WDM database.

- Remote session information is stored in the *ArchiveClientBroker* table of WDM database.
- To perform the cleanup run the SQL Server script *RapportDB\_ClearBrokerInfo* in the MSDB database which is available in the HF. This also requires starting the *SQLServerAgent* component of SQL Server.
- Based on the number of days, for storing remote session data, specified in the WDM GUI → Configuration Manager → Preferences, this job deletes records older than that number of days from *ArchiveClientBroker* table.

Steps to setup SQL Server script *RapportDB\_ClearBrokerInfo* to clear *ArchiveClientBroker* table:

1. On the WDM database server running SQL Server, open Microsoft SQL Management Studio.
2. Login with sa or domain user or domain administrator credentials that have administrative access to WDM database.
3. Open a New Query.
4. Execute the script *RapportDB\_ClearBrokerInfo* available in the following location:  
<WDM hotfix 3>\setupfiles\SQL\_Query.
5. Start the *SQLServerAgent* if it is not started.
6. SQL Management Studio will show the Job listed as below:

